

OIPE

DATE: 02/11/2002 RAW SEQUENCE LISTING PATENT APPLICATION: US/10/023,929 TIME: 08:42:53

Input Set : N:\Crf3\RULE60\10023929.raw Output Set: N:\CRF3\02112002\J023929.raw

## SEQUENCE LISTING

```
3 (1) GENERAL INFORMATION:
             (i) APPLICANT: Hillman, Jennifer L.
      6
                            Goli, Surya K.
      8
            (ii) TITLE OF INVENTION: NOVEL HUMAN MLS3 PROTEIN
     11
           (iii) NUMBER OF SEQUENCES: 6
            (iv) CORRESPONDENCE ADDRESS:
     13
     14
                  (A) ADDRESSEE: Incyte Pharmaceuticals, Inc.
     15
                  (B) STREET: 3174 Porter Drive
     16
                  (C) CITY: Palo Alto
     17
                  (D) STATE: CA
     18
                  (E) COUNTRY: USA
     19
                  (F) ZIP: 94304
                                                           21
             (V) COMPUTER READABLE FORM:
     22
                  (A) MEDIUM TYPE: Diskette
     23
                  (B) COMPUTER: IBM Compatible
     24
                  (C) OPERATING SYSTEM: DOS
     25
                  (D) SOFTWARE: FastSEQ for Windows Version 2.0
     27
            (vi) CURRENT APPLICATION DATA:
C--> 28
                  (A) APPLICATION NUMBER: US/10/023,929
C--> 29
                  (B) FILING DATE: 17-Dec-2001
     35
                  (C) CLASSIFICATION:
     37
           (vii) PRIOR APPLICATION DATA:
     33
                  (A) APPLICATION NUMBER: US/09/205,449
     34
                  (B) FILING DATE: 1998-12-04
     38
                  (A) APPLICATION NUMBER: 08/805,965
     39
                  (B) FILING DATE: 1997-02-25
    41
          (viii) ATTORNEY/AGENT INFORMATION:
    42
                  (A) NAME: Billings, Lucy J.
                  (B) REGISTRATION NUMBER: 36,749
    43
    44
                  (C) REFERENCE/DOCKET NUMBER: PF-0223 US
    46
            (ix) TELECOMMUNICATION INFORMATION:
    47
                  (A) TELEPHONE: 415-855-0555
    48
                  (B) TELEFAX: 415-845-4166
    49
                  (C) TELEX:
    52 (2) INFORMATION FOR SEQ ID NO: 1:
    54
             (i) SEQUENCE CHARACTERISTICS:
    55
                  (A) LENGTH: 262 amino acids
    56
                  (B) TYPE: amino acid
    57
                  (C) STRANDEDNESS: single
    58
                  (D) TOPOLOGY: linear
    60
           (vii) IMMEDIATE SOURCE:
    61
                  (A) LIBRARY: BRAITUT02
```

Input Set : N:\Crf3\RULE60\10023929.raw
Output Set: N:\CRF3\02112002\J023929.raw

```
62
                  (B) CLONE: 762280
     64
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
     66
        Met Phe Arg Phe Met Arg Asp Val Glu Pro Glu Asp Pro Met Phe Leu
     67
                         5
                                             10
     68 Met Asp Pro Phe Ala Ile His Arg Gln His Met Ser Arg Met Leu Ser
     69
                     20
                                         25
     70
        Gly Gly Phe Gly Tyr Ser Pro Phe Leu Ser Ile Thr Asp Gly Asn Met
     71
                                     40
    72
         Pro Gly Thr Arg Ala Ala Ser Arg Arg Met Gln Gln Ala Gly Ala Val
    73
        Xaa Pro Phe Gly Xaa Leu Gly Met Ser Gly Gly Phe Met Asp Met Phe
  -> 74
     75
                             70
                                                 75
W--> 76
        Gly Met Met Asn Asp Met Xaa Gly Asn Met Glu His Met Thr Ala Gly
    77
                         85
                                             90
     78
        Gly Asn Cys Gln Thr Phe Ser Ser Ser Thr Val Ile Ser Tyr Ser Asn
    79
                     100
                                         105
                                                              110
    80
        Thr Gly Asp Gly Ala Pro Lys Val Tyr Gln Glu Thr Ser Glu Met Arg
    81
                                     120
    82
        Ser Ala Pro Gly Gly Ile Arg Glu Thr Arg Arg Thr Val Arg Asp Ser
    83
            130
                                 135
        Asp Ser Gly Leu Glu Gln Met Ser Ile Gly His His Ile Arg Asp Arg
    84
    85
                             150
                                                 155
        Ala His Ile Leu Gln Arg Ser Arg Asn His Arg Thr Gly Asp Gln Glu
    87
                         165
                                             170
    88
        Glu Arg Gln Asp Tyr Ile Asn Leu Asp Glu Ser Glu Ala Ala Ala Phe
    89
                    180
                                         185
    90
        Asp Asp Glu Trp Arg Arg Glu Thr Ser Arg Phe Arg Gln Gln Arg Pro
    91
                                     200
    92
        Leu Glu Phe Arg Arg Leu Glu Ser Ser Gly Ala Gly Gly Arg Arg Ala
    93
                                 215
                                                     220
        Glu Gly Pro Pro Arg Leu Ala Ile Gln Gly Pro Glu Asp Ser Leu Pro
    95
                             230
                                                 235
    96
        Asp Ser Pro Ala Ala Met Thr Gly Glu Gly Pro Gly Ala Ser Ala Leu
    97
                        245
                                             250
    98
        Leu Tyr Arg Leu Arg Gly
    99
                    260
    101 (2) INFORMATION FOR SEQ ID NO: 2:
             (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 1322 base pairs
    105
                  (B) TYPE: nucleic acid
    106
                  (C) STRANDEDNESS: single
    107
                  (D) TOPOLOGY: linear
    109
           (vii) IMMEDIATE SOURCE:
    110
                  (A) LIBRARY: BRAITUT02
    111
                  (B) CLONE: 762280
    113
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
    115 GGGGGGCGTA CGGAGGTGGC AGCTGTGGGA GGAGGCGGCG TGGAAGGCCG AGGAGCTCAA
                                                                                 60
         GCCCGGACCA ATCCCCACGT TCCGGGCCGC CACCCTGACC CTGCAGCGTA CCGGGAAGCG
    116
                                                                                120
    117
         AAACCGGCCG GATGGGCCGC TGAGCCCGAA TCGGGCACTG TGTGGAGCCC CCTGGAGCTG
```

Input Set : N:\Crf3\RULE60\10023929.raw
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118 AGATCAGGAT GTTCCGCTTC ATGAGGGACG TGGAGCCTGA GGATCCCATG TTCCTGATGG
119 ATCCCTTTGC TATTCACCGT CAGCATATGA GCCGTATGTT GTCAGGTGGC TTTGGATATA
                                                                           300
120 GCCCCTTCCT CAGCATCACA GATGGCAACA TGCCAGGGAC CAGGGCTGCC AGCCGCCGGA
                                                                           360
121 TGCAGCAGGC TGGAGCTGTC TNCCCCTTTG GGNTGCTGGG AATGTCGGGT GGTTTCATGG
122
     ACATGTTTGG GATGATGAAT GACATGNTTG GAAACATGGA ACACATGACA GCTGGAGGCA
123 ATTGCCAGAC CTTCTCATCT TCCACTGTCA TCTCCTACTC CAATACGGGT GATGGTGCCC
                                                                           540
124 CCAAGGTCTA CCAAGAGACA TCAGAGATGC GCTCGGCACC AGGCGGGATC CGGGAGACAC
                                                                           600
125 GGAGGACTGT TCGGGATTCA GACAGTGGAC TGGAGCAGAT GTCCATTGGG CATCACATCC
126 GGGACAGGGC TCACATCCTC CAGCGCTCCC GAAACCATCG CACGGGGGAC CAGGAGGAGC
                                                                           720
127 GGCAGGACTA TATCAACCTG GATGAGAGTG AGGCCGCAGC GTTTGATGAC GAGTGGCGGC
                                                                           780
128 GGGAGACCTC CCGATTCCGG CAGCAGCGTC CCCTGGAGTT TCGGCGGCTT GAGTCCTCAG
                                                                           840
129
     GGGCTGGGGG ACGAAGGGCG GAGGGGCCTC CCCGCCTGGC CATCCAGGGA CCTGAGGACT
130 CCCTTCCCGA CAGTCCCGCC GCTATGACTG GTGAGGGCCC CGGGGCCTCA GCTCTCTTGT
                                                                           960
131 ACAGGCTGAG AGGCTGAGAA ATCATCCCCT GAATAACTTT TTCCTCTCGA TTCCCATCCC
                                                                          1020
132 CAATTTAATA TTAAATTAAC AGGCAAGCCG GCCCCACCT CTCCCTGGGG GTCTCAGGGA
133 GAACCTTTCA CGGCACCCTT TCCCTACCTT TTCCTTCTTT AATCTCCTGG TTTACCATTG
                                                                          1140
134 ATGACTTCGG CTCTGCATCT ACTTACTTGA TTTTTCATTC TGCCACTTCA TCTTCAAACC
                                                                          1200
135 CCCTCACCTT TCCCATCCTA CTCCTGCCAT GCATTGAAGG GTCAATGCAT TTTGGGGTGA
                                                                          1260
136 GNTTNGGTTT AGGGGCCCCT TCATNCCTNA GCTACCTGGG TCTTTGCCCA ACTTTTCTCA
                                                                          1320
137
                                                                          1322
139 (2) INFORMATION FOR SEQ ID NO: 3:
141
        (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 268 amino acids
143
              (B) TYPE: amino acid
144
              (C) STRANDEDNESS: single
145
              (D) TOPOLOGY: linear
147
     (vii) IMMEDIATE SOURCE:
148
              (A) LIBRARY: GenBank
149
              (B) CLONE: 1066392
151
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
    Met Phe Arg Met Leu Asn Ser Ser Phe Glu Asp Asp Pro Phe Phe Ser
154
                      5
                                         10
155
     Glu Ser Ile Leu Ala His Arg Glu Asn Met Arg Gln Met Ile Arg Ser
156
                 20
                                     2.5
157
     Phe Ser Glu Pro Phe Gly Arg Asp Leu Leu Ser Ile Ser Asp Gly Arg
158
                                 40
159
     Gly Arg Ala His Asn Arg Arg Gly His Asn Asp Gly Glu Asp Ser Leu
160
                             55
161
     Thr His Thr Asp Val Ser Ser Phe Gln Thr Met Asp Gln Met Val Ser
162
                         70
163
    Asn Met Arg Asn Tyr Met Gln Lys Leu Glu Arg Asn Phe Gly Gln Leu
164
                                         90
165
     Ser Val Asp Pro Asn Gly His Ser Phe Cys Ser Ser Ser Val Met Thr
166
                 100
                                     105
167
     Tyr Ser Lys Ile Gly Asp Glu Pro Pro Lys Val Phe Gln Ala Ser Thr
168
                                 120
                                                     125
169
    Gln Thr Arg Arg Ala Pro Gly Gly Ile Lys Glu Thr Arg Lys Ala Met
170
                             135
                                                 140
171
    Arg Asp Ser Asp Ser Gly Leu Glu Lys Met Ala Ile Gly His His Ile
```

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```
172
    145
                         150
                                             155
                                                                  160
173
    His Asp Arg Ala His Val Ile Lys Lys Ser Lys Asn Lys Lys Thr Gly
174
                     165
                                         170
     Asp Glu Glu Val Asn Gln Glu Phe Ile Asn Met Asn Glu Ser Asp Ala
175
176
                 180
                                     185
177
     His Ala Phe Asp Glu Glu Trp Gln Ser Glu Val Leu Lys Tyr Lys Pro
178
                                 200
     Gly Arg His Asn Leu Gly Asn Thr Arg Met Arg Ser Val Gly His Glu
180
                             215
                                                  220
181
     Asn Pro Gly Ser Arg Glu Leu Lys Arg Arg Glu Lys Pro Gln Gln Ser
182
                         230
                                             235
183
     Pro Ala Ile Glu His Gly Arg Arg Ser Asn Val Leu Gly Asp Lys Leu
184
                     245
                                         250
185
    His Ile Lys Gly Ser Ser Val Lys Ser Asn Lys Lys
186
                 260
188 (2) INFORMATION FOR SEQ ID NO: 4:
190
        (i) SEQUENCE CHARACTERISTICS:
191
              (A) LENGTH: 1116 base pairs
192
              (B) TYPE: nucleic acid
193
              (C) STRANDEDNESS: single
194
              (D) TOPOLOGY: linear
196
      (vii) IMMEDIATE SOURCE:
197
              (A) LIBRARY: GenBank
198
              (B) CLONE: 1066391
200
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
202
    GTTATGTGTT CCCGTCCGTA CTGGAGGCTA GCTCTTGTCG CGGCCGCGGC GAGTTAACAT
                                                                            60
203
    CGTTTTTCCA ATCTGTCCGC GGCTGCCGCC ACCCAAGACA GAGCCAGAAT GTTCAGGATG
                                                                           120
204
    CTGAACAGCA GTTTTGAGGA TGACCCCTTC TTCTCTGAGT CCATTCTTGC ACACCGAGAA
                                                                           180
205
    AATATGCGAC AGATGATAAG AAGTTTTTCT GAACCCTTTG GAAGAGACTT GCTCAGTATC
206 TCTGATGGTA GAGGGAGAGC TCATAATCGT AGAGGACATA ATGATGGTGA AGATTCTTTG
207
    ACTCATACAG ATGTCAGCTC TTTCCAGACC ATGGACCAAA TGGTGTCAAA TATGAGAAAC
                                                                           360
208 TATATGCAGA AATTAGAAAG AAACTTCGGT CAACTTTCAG TGGATCCAAA TGGACATTCA
                                                                           420
209 TTTTGTTCTT CCTCAGTTAT GACTTATTCC AAAATAGGAG ATGAACCGCC AAAGGTTTTT
                                                                           480
210 CAGGCCTCAA CTCAAACTCG TCGAGCTCCA GGAGGAATAA AGGAAACCAG GAAAGCAATG
211
    AGAGATTCTG ACAGTGGACT AGAAAAAATG GCTATTGGTC ATCATATCCA TGACCGAGCT
                                                                           600
212 CATGTCATTA AAAAGTCAAA GAACAAGAAG ACTGGAGATG AAGAGGTCAA CCAGGAGTTC
                                                                           660
213 ATCAATATGA ATGAAAGCGA TGCTCATGCT TTTGATGAGG AGTGGCAAAG TGAGGTTTTG
                                                                           720
214 AAGTACAAAC CAGGACGACA CAATCTAGGA AACACTAGAA TGAGAAGTGT TGGCCATGAG
215 AATCCTGGCT CCCGAGAACT TAAAAGAAGG GAGAAACCTC AACAAAGTCC AGCCATTGAA
                                                                           840
216 CATGGAAGGA GATCAAATGT TTTGGGGGAC AAACTCCACA TCAAAGGCTC ATCTGTGAAA
                                                                           900
217
    AGCAACAAAA AATAAATAGC CATGCATTTG ATTTGTTTAG TTTTGATTGT TTTAACAGTT
                                                                           960
218 AGTAATGGTG CTGGGTAATA AGCATAAGAC CAATCTCTTG CTGTTAAATC AGTTCTGTCC
                                                                          1020
    TTGGCAACTT TCTTCTGATA TCTGAATGTT CATGAAGGTC CTAGCTTTAT ATTGTCCCTC
219
                                                                          1080
220
    TTTTAGGAAT AAAATTTTGA TTTTCAACAA AAAAAA
                                                                          1116
222 (2) INFORMATION FOR SEQ ID NO: 5:
224
        (i) SEQUENCE CHARACTERISTICS:
225
              (A) LENGTH: 248 amino acids
226
              (B) TYPE: amino acid
227
              (C) STRANDEDNESS: single
```

Input Set : N:\Crf3\RULE60\10023929.raw
Output Set: N:\CRF3\02112002\J023929.raw

```
228
              (D) TOPOLOGY: linear
       (vii) IMMEDIATE SOURCE:
231
               (A) LIBRARY: GenBank
               (B) CLONE: 1399745
232
234
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
236
     Met Phe Arg Phe Met Arg Asp Val Glu Pro Glu Asp Pro Met Phe Leu
237
                                          10
238
     Met Asp Pro Phe Ala Ile His Arg Gln His Met Ser Arg Met Leu Ser
239
                  20
                                      25
240
     Gly Gly Phe Gly Tyr Ser Pro Phe Leu Ser Ile Thr Asp Gly Asn Met
241
                                  40
242
     Pro Gly Thr Arg Pro Ala Ser Arg Arg Met Gln Gln Ala Gly Ala Val
243
                              55
244
     Ser Pro Phe Gly Met Leu Gly Met Ser Gly Gly Phe Met Asp Met Phe
245
                          70
                                              75
246
     Gly Met Met Asn Asp Met Ile Gly Asn Met Glu His Met Thr Ala Gly
247
                     85
                                          90
248
     Gly Asn Cys Gln Thr Phe Ser Ser Ser Thr Val Ile Ser Tyr Ser Asn
249
                 100
                                      105
250
     Thr Gly Asp Gly Ala Pro Lys Val Tyr Gln Glu Thr Ser Glu Met Arg
251
             115
                                  120
252
     Ser Ala Pro Gly Gly Ile Arg Glu Thr Arg Arg Thr Val Arg Asp Ser
253
                              135
                                                  140
254
    Asp Ser Gly Leu Glu Gln Met Ser Ile Gly His His Ile Arg Asp Arg
255
                         150
                                              155
256
     Ala His Ile Leu Gln Arg Ser Arg Asn His Arg Thr Gly Asp Gln Glu
257
                     165
                                          170
258
    Glu Arg Gln Asp Tyr Ile Asn Leu Asp Glu Ser Glu Ala Ala Phe
259
                 180
                                      185
260
    Asp Asp Glu Trp Arg Arg Glu Thr Ser Arg Phe Arg Gln Gln Arg Pro
261
                                  200
262
    Leu Glu Phe Arg Arg Leu Glu Ser Ser Gly Ala Gly Gly Arg Arg Ala
263
         210
                              215
                                                  220
264
     Glu Gly Pro Pro Arg Leu Ala Ile Gln Gly Pro Glu Asp Ser Pro Ser
265
                         230
                                              235
266
    Arg Gln Ser Arg Arg Tyr Asp Trp
267
                     245
269 (2) INFORMATION FOR SEQ ID NO: 6:
271
         (i) SEQUENCE CHARACTERISTICS:
272
              (A) LENGTH: 1502 base pairs
273
              (B) TYPE: nucleic acid
274
              (C) STRANDEDNESS: single
275
              (D) TOPOLOGY: linear
277
       (vii) IMMEDIATE SOURCE:
278
              (A) LIBRARY: GenBank
279
              (B) CLONE: 1399744
281
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
283
    CTCTAAAGGG CAGCTGTGGG AGGAGGCGGC GTGGAAGGCC GAGGAGCTCA AGCCCGGACC
284
    AATCCCCACG TTCCGGGCCG CGACCCTGAC CCTGCAGCGT ACCGGGAAGC GAAACCGGCC
```

6.0

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/023,929

DATE: 02/11/2002

3,929 TIME: 08:42:55

Input Set : N:\Crf3\RULE60\10023929.raw
Output Set: N:\CRF3\02112002\J023929.raw

L:28 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:29 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]

L:74 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:76 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1